WE CLAIM:

1. A layered crystalline metallosilicate composite wherein layers are contiguous, compositionally heterogeneous and of a single zeolitic isotype and comprise:

(a) a catalytically active core comprising a zeolitic aluminosilicate selected from the group consisting of MFI, MEL, MTW and TON having a $SiO_2:Al_2O_3$ ratio below 45; and,

(b) a mantle comprising a crystalline metallosilicate which comprises a framework metal selected from one or more of the group consisting of boron, indium, gallium and iron.

2. The composite of Claim 1 wherein the zeolitic aluminosilicate of (a) is an MFI isotype characterized by an empirical chemical composition on an anhydrous basis expressed by the formula:

$$0.9 \pm 0.2\ X_{2/n}O:Al_2O_3:ySiO_2$$

where X is a cation of valence n and y is between about 8 and 50.

3. The composite of Claim 1 wherein the crystalline metallosilicate of (b) is characterized by an empirical chemical composition on an anhydrous basis expressed by the formula:

$$0.9 \pm 0.2\ X_{2/n}O:M_2O_y:zSiO_2$$

where X is a cation of valence n, M is a metal of valence y selected from one or more of the group consisting of boron, indium, gallium and iron and z is between about 4 and 500.

4. The composite of Claim 1 further having the substantial absence of framework phosphorus.

5. The composite of Claim 1 wherein the framework metal of (b) consists essentially of boron and the metallosilicate consists essentially of boralite.

6. The composite of Claim 5 wherein the crystalline metallosilicate of (b) is characterized by an empirical chemical composition on an anhydrous basis expressed by the formula:

$$0.9 \pm 0.2\ X_{2/n}O:B_2O_3:ySiO_2$$

where X is a cation of valence n and y is between about 4 and 500.

7. The composite of Claim 1 wherein the crystalline metallosilicate composite consists essentially of:

(a) a catalytically active core comprising a zeolitic aluminosilicate, and,

(b) a mantle comprising a crystalline boralite.

8. The composite of Claim 1 further comprising an inorganic oxide binder.

9. The composite of Claim 8 wherein the inorganic oxide is selected from one or more of silica, alumina and phosphorus oxide.

10. The composite of Claim 9 consisting essentially of a catalytically active core comprising a zeolitic aluminosilicate having a $SiO_2:Al_2O_3$ ratio between 25 and 40, a mantle comprising a crystalline boralite, and an aluminum phosphate binder.

11. The composite of Claim 1 prepared by successive steps comprising:

(a) reacting an aqueous mixture containing reactive sources of silica and alumina and a templating agent at a temperature of from about 25° to 300°C for a period of time sufficient to effect crystallization, and separating solid aluminosilicate; and,

(b) reacting a mixture containing the solid aluminosilicate and reactive sources of silica and an oxide of one or more of the group consisting of boron, indium, gallium and iron and a templating agent at a temperature of from about 25° to 300°C for a period of time sufficient to effect crystallization, and separating crystals of the composite.

12. A process for the conversion of a hydrocarbon feedstock comprising contacting the feedstock with a layered crystalline metallosilicate composite wherein layers are contiguous, compositionally heterogeneous and of a single zeolitic isotype and comprise:

(a) a catalytically active core comprising a zeolitic aluminosilicate having a SiO_2:Al_2O_3 ratio less than about 40 and selected from the group consisting of MFI, MEL, MTW and TON zeolites, and,

(b) a mantle comprising a crystalline metallosilicate which comprises a framework metal selected from one or more of the group consisting of boron, indium, gallium and iron;

in a conversion zone at hydrocarbon-conversion conditions to obtain an upgraded product.

13. The process of Claim 12 wherein the composite further comprises at least one non-framework metal selected from the group consisting of the metals of Groups IIA (IUPAC 13), IVA (IUPAC 14), VIB (IUPAC 6), VIIB (IUPAC 7) and VIII (IUPAC 8-10).

14. A process for the disproportionation of a toluene-containing feedstock comprising contacting the feedstock with a layered crystalline metallosilicate composite wherein layers are contiguous, compositionally heterogeneous and of an MFI isotype and comprise:

(a) a catalytically active core comprising a zeolitic aluminosilicate, having a SiO_2:Al_2O_3 ratio less than about 45 and,

(b) a mantle comprising a crystalline boralite;

in a disproportionation zone at disproportionation conditions to obtain a paraxylene-rich product.

15. The process of Claim 14 wherein the disproportionation conditions comprise a temperature of from about 200° to 600°C, a pressure of from about 100 kPa to 6 MPa absolute, and a liquid hourly space velocity of from about 0.2 to 10 hr^{-1}.

16. The process of Claim 15 wherein free hydrogen is present in a molar ratio to feedstock hydrocarbons of about 0.5 to 10.

17. The process of Claim 14 wherein the composite consists essentially of a catalytically active core comprising a zeolitic aluminosilicate having a SiO_2:Al_2O_3 ratio between about 20-40, a mantle comprising a crystalline boralite, and an aluminum phosphate binder.

18. The process of Claim 14 wherein the product contains paraxylene in excess of its equilibrium concentration at disproportionation conditions.

19. The process of Claim 14 further comprising deposition at precoking conditions of between about 5 and 40 mass-% carbon on the composite prior to its use for disproportionation of the feedstock.

20. The process of Claim 19 wherein the precoking conditions comprise a temperature at least about 90°C higher than utilized in the subsequent disproportionation.